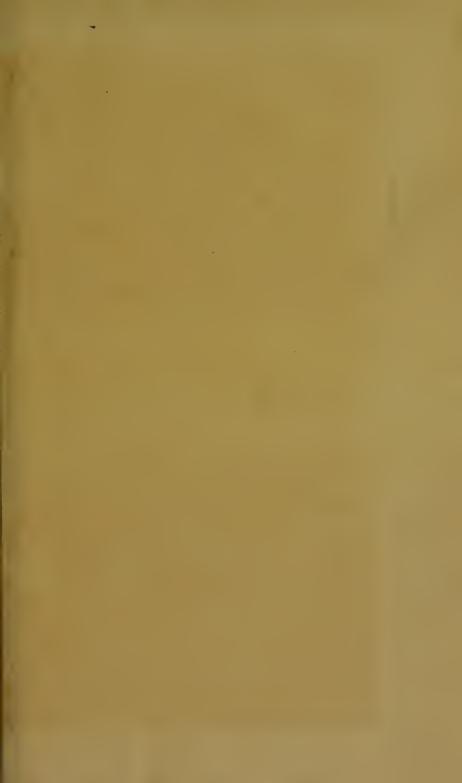
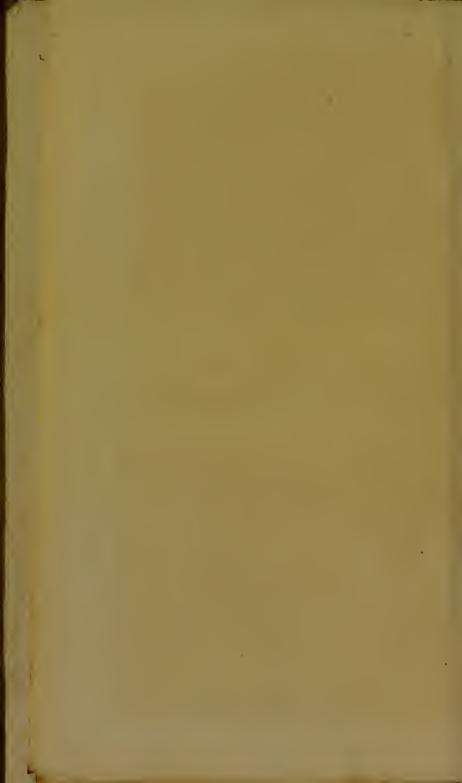


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GERBAUX

ON THE

TEETH.



GERBAUX ON THE TEETH,

WITH

OBSERVATIONS

ON THE

MOST FREQUENT DISEASES INCI-DENTAL TO THE MOUTH, &c. &c. &c.

A POPULAR TREATISE,

ADDRESSED TO THE

FACULTY AND HEADS OF FAMILIES.

TRANSLATED FROM THE FRENCH

RY

A MEMBER OF FACULTY.

Etre utile sans pretention.

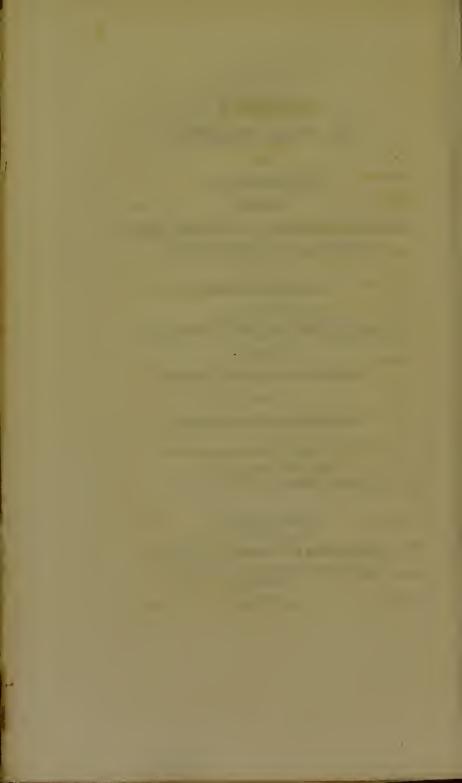
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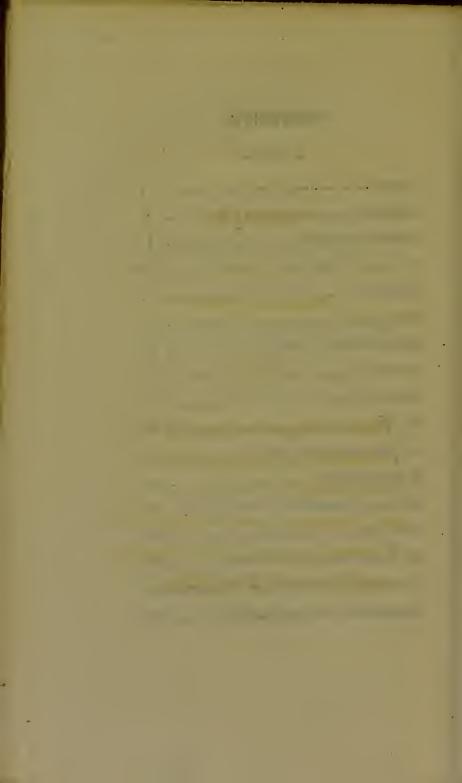
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1817.



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PREFACE

OF THE

TRANSLATOR.

THE celebrity which the following Work has obtained on the Continent, and the pleasure experienced on its perusal, were the first inducements which determined the Translator to present it, in its present modified form, to the British Public.

As the original title, (Conseils aux Dames) accords so ill with its valuable contents, he has been tempted to alter it; but when he considers how well the language of the author has been adapted to the general reader, divested of those technical, and perhaps more scientific terms, which are understood by professional men alone, he fears that the one which he has selected may, in some measure, frustrate the object of its publication, which is General Utility.

The importance of the subject, and the little attention which has been paid to it in this country, also led him to conceive that

his time would be well devoted, if, by any endeavour on his part, he could contribute to interest the profession in a branch of Surgery which has been unreasonably allowed to wander so far out of the sphere of regularly educated Practitioners.

None is of such universal utility, and therefore of greater importance, and yet there is none which has been so much in the hands of Charlatans and Empirics, to the prejudice and ridicule of the medical profession, and to the injury and suffering of mankind: Yet it is only in Scotland that this branch of practice has met with

such unmerited neglect; and we are obliged, reluctantly, to acknowledge our gratitude to strangers, for exertions which our own indolence or prejudices have prevented us from sharing in, or, as in many other useful improvements, taking the lead.

"IT was in France about the year 1700, (we are told), that several eminent Surgeons of Paris began to confine their operations to diseases of the mouth and teeth alone; from which may be dated the commencement of useful knowledge in that branch, founded on experience."

Since that period, France has to boast of Fauchard, Bourdet, and many others; Spain, of Gariot; England, of Fox; and Ireland, of Blake; but the Calendar of Scotland of men distinguished in this branch is yet to be filled up. Hunter, the pride of English surgery, it is true, carried his talents from this "land of brown heath," and also enriched our knowledge on this subject; but his avocations never permitted him to reduce his knowledge to practice; and his work, much though it ought to be esteemed, will nevertheless, in consequence, always be considered less valuable than otherwise it would have been.

THE present little Volume, the Translator thinks, will be found a useful compendium of instruction, as well to those from whom it originally takes its title. as to society in general. On the Continent, where it is made the companion of the mother in her nursery, incalculable advantages may be expected in future to be derived by those who are the objects of her maternal care; and it is hoped that in this country, where the maternal feelings constitute the most amiable qualification of its females, and the brightest gem in the hymeneal crown, that it will be found no less deserving of their serious study and attention.

THE TRANSLATOR.

INTRODUCTION.

Medical men are obliged by their profession to study unceasingly, and to meditate constantly, on those branches of Medical Science which seem to present the greatest utility to the human race: nothing is more delightful, above all, than interesting ourselves in an especial manner in those individuals who make it a duty to captivate.

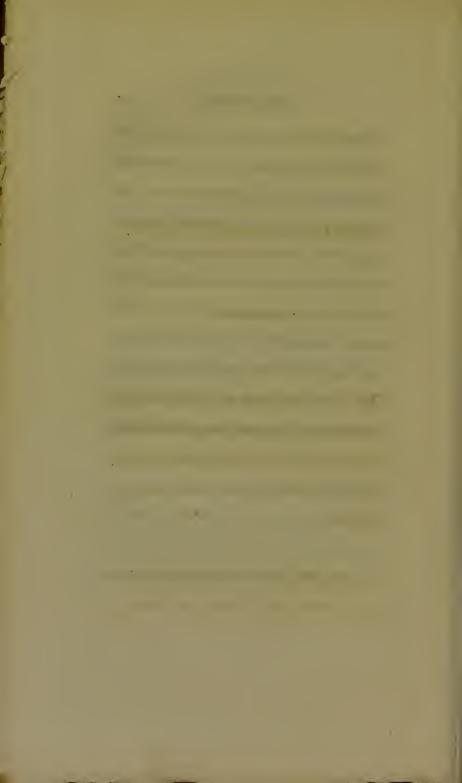
our attentions. Man, by his robust constitution, his masculine education, and his particular avocation, appears the most capable to support the pains and the physical ills to which Nature seems to have doomed him. But man, considered in the two extremes of life, is in a situation which ought particularly to interest the philanthrophic physician. To assuage the ills of declining age, to prevent or ward off those of infancy, are doubtless incontestable titles to the esteem of mankind.

THE assistance which these two conditions of man demand, is equally the province of the Physician and of the Surgeon. The last exacts from him who exercises the profession, not only knowledge, address, manual dexterity, and an excellent judgement, but also a moral disposition altogether peculiar, which Nature alone can give. It is by it that the surgeon, in a manner, identifies himself with his patient, whom he consoles, by bestowing on him those affectionate attentions which always influence, in a very sensible degree, the state of sickness.

But it is principally among the female sex that this disposition is advantageous in an eminent degree. What being in the creation has an equal title to captivate the attention of the Physician; and more particularly still, that of the Surgeon? since the greater number of circumstances in sickness, under which woman is placed from infancy, even to the age when her constitution approaches more nearly to that of man, are more especially his province.

It is from these general considerations, arising from the remarks which we have made in the course of our practice, that we have been determined to redouble our endeavours to make the opportunities afforded us useful to mankind, but more particularly to the female sex; from whom, above all, we beg to claim indulgence for our feeble efforts.

The branch which we mean to treat of merits more attention than is commonly thought; and we hope our readers will be convinced of it after the perusal of our observations. If we are happy enough to have attained this object, we will cheerfully congratulate ourselves for having undertaken to demonstrate, that men in our profession ought never to sacrifice duty to interest, and that their only end, under all circumstances, ought to be truth and utility.



GENERAL CONSIDERATIONS.

OF all the parts of the human frame, the mouth is, without contradiction, that which ought the most to fix the attention, and which merits the most to be preserved with care.

THAT part, where Nature seems to have placed the seat of the Graces and of Beauty,

contains also several of the principal organs necessary to the maintenance of life. It demands cares which are indispensable to cleanliness, not only for the preservation of the teeth and of the gums, and the charms which result from it, but also to have an easy pronunciation, and not to diffuse around us an odour infectious, and sometimes insupportable to the society we are among.

We venture even to say, that the bad state of the mouth has more influence than is commonly imagined over the functions of the digestive organs; and we do not fear to be contradicted in this by the most distinguished physiologists. For if the teeth,

the principal instruments of mastication, are diseased; if the gums, loaded with tartar, are painful, it will result from this, that the alimentary mass being imperfectly triturated, and not impregnated with a sufficient quantity of saliva, the work of digestion will be performed more laboriously, and will consequently produce a chyle less proper for repairing our strength. On the other hand, if the saliva is vitiated by the foul state of the mouth, this secretion, so essential to good digestion, will equally communicate to the chyle its pernicious qualities.

It is upon these facts that we found our

opinion. The old man, who has preserved his teeth in good condition, is much less frail than he who has lost them early by inattention. The youth, who is well endowed by Nature in this particular, promises to lead a life more vigorous than he whose teeth have prematurely decayed.

It is at the epoch of the second dentition, towards the seventh year of our life, that it so often becomes useful to consult men of our art, to give to the teeth a proper direction. At that age, and even at all the periods of life, some advices, some trivial aids and cares, will suffice to obviate the real inconveniences and troublesome

accidents which, by an unpardonable negligence, happen to the mouth. Such are the irregular growth of the teeth, caries, instability, their total loss, the various alterations of the gums, fungous tumours of the membrane of the mouth, suppuration of the membrane of the sockets, fistulæ, ulcers of different kinds; some of which that have their seat on the tongue are frequently maintained by the irritation of the pointed extremity of a tooth ill placed or broken.

In fine, such attentions, timely adopted, will often prevent those insupportable pains, the ordinary consequence of caries, which

by its progress has exposed the very sensible membrane which lines the internal cavity of the tooth, and which, of all the pains to which man is subject, is perhaps the most intolerable.

IF we consider these ravages in relation to the disgust which they lead in their train, we shall say that there is nothing more repulsive than a mouth which exhibits teeth black, deformed, or carious, and which exhales a fœtid odour; that nothing is more disagreeable than a person who articulates with difficulty, and who darts saliva in the face of him to whom he is speaking.

Nothing pleases so much, on the contrary, as the mouth which articulates with ease; whose gracious smile shows a range of teeth as beautiful by their whiteness as by their regularity, and which sheds around it all the freshness of health.

It will be objected, perhaps, to what we have said, that many people who have beantiful teeth and a healthy mouth pay no attention to these parts; whilst those who attach a great value to them, and take the greatest care of them, have much trouble in preserving them.

But it will also be an easy matter to re-

parison between children born of parents of sound constitution, and reared in the country, and those born in cities, whom an ill conducted education has predisposed to a debility of organization often to be recognized by the state of their teeth alone. It ought therefore, perhaps, to be remarked, that diseased teeth among many individuals originate in organic disposition, which may be transmitted hereditarily from fathers to their children.

We cannot deny ourselves the pleasure of extracting from an esteemed author a paragraph which merits our commendations *. " The teeth are the most lovely " ornament of the human countenance: " their regularity and their whiteness con-" stitute that ornament: these qualities ri-" vet our regards, and add new charms to " the beauty of the countenance. If the " mouth exceeds in size its ordinary pro-" portions, fine teeth serve to disguise this " natural error in its conformation; and of-" ten, even the illusion which results from " the perfection of their arrangement, is " such, that we imagine the mouth would " not have looked so well if it had been " smaller.

^{*} Dictionnaire des Sciences Medicales.

26 GENERAL CONSIDERATIONS.

"OBSERVE that lady smile whose mouth discloses the perfection of their arrangement; you will never think of remarking the extent of the diameter of her mouth, all your attention will be fixed upon the beauty of her teeth, and upon the gracious smile which so generously exposes them.

"This ornament is equally attractive in both sexes; it distinguishes the elegant from the slovenly gentleman, and diffuses amiability over the countenance by softening the features. Those of the black African cease to frighten the timid beauty, when he smilingly shows his teeth sparkling with whiteness.

" Bur it is more particularly to woman " that fine teeth are necessary, since it is " her destiny, first to gratify our eyes be-" fore she touches our soul, and captivates " and enslaves our heart. The influence " which the teeth exercise over beauty, " justifies the pre-eminence which I attri-" bute to them over all the other attrac-"tions of the countenance. Let a woman " have fine eyes, a pretty mouth, a hand-" some nose, a well-turned forehead, ele-" gant hair, a charming complexion, but " let her also have bad teeth, teeth black-" ened by caries, and covered with thick " tartar, or a viscid concretion; in a word, " let her exhale a contaminated breath,

- " (which discovers her approaches before
- " herself appears) we should cease to think
- " her beautiful the instant she opens her
- " mouth. She herself, aware of the un-
- 66 happy effects of her smile, constrains it
- " into grimace, to conceal the ravages
- " which disease has made on her teeth.
- "ON the contrary, if she has a large

 nose or small eyes, if she be even ugly,

 provided that her teeth are regularly

 planted, that they are white, and above

 all, that she possesses the whole of them,

 or at least those which are visible; this

 woman's countenance, however frightful

 she be, will appear agreeable the mo-

- " ment that a smile comes to her aid, and
- " she will hear whispered around her those
- " words so consoling to her vanity, What
- " beautiful teeth she has!
 - "WHEN Nature, sparing of her gifts, shall
- " have failed to bestow them on the teeth,
- " making them defective in form, and tar-
- " nished in colour, care and extreme clean-
- " liness must be resorted to, to supply the
- " imperfections and hide the faults. In
- " this case at least, if the teeth do not at-
- " tract our regards, they do not affect us
- " disagreeably."

It is impossible to imagine a picture

30

more faithful, and at once more illustrative of the advantages and inconveniences attached to the different states in which the teeth are found; The intelligent author who has traced it, has neither omitted nor exaggerated any thing. We ourselves have felt the agreeable impression which is experienced on seeing a mouth furnished with elegant teeth, whose gums and the other parts of it are of a vermilion red,

" Shining in the roseate bloom of health."

But we also say with regret, that we have too often had occasion to experience an altogether opposite impression, at the sight of a mouth repulsive and ill conditioned †.

"All near approaches threaten death:

We may be shipwreek'd by her breath:

Love favour'd once with that sweet gale,

Doubles his haste and fills his sai!,

Till she arrive where she must prove

The haven or the rock of Love.

So we the Indian coast do know

At distance, when the spices blow,

By the rich odour taught to steer,

Though neither day nor stars appear."

WALLER.

[†] Benserade has said of a young lady whom he had heard sing, and who had a breath very strong,

32 GENERAL CONSIDERATIONS.

OUR readers, perhaps, will not be displeased with a short description of the teeth. We shall pass afterwards to some considerations upon the nature of the Enamel, upon the formation of Tartar, and upon the pain called "Toothache," (Odontalgia,) &c.

[&]quot;What a beautiful voice, and very charming words; but the air is worth nothing." Mais l'air n'en vaut rien.

DESCRIPTION OF THE TEETH.

THE teeth are small very hard bodies implanted regularly in the jaw-bones, in small cavities called sockets, formed on the borders of these bones. We remark in each of them a crown or body, which is the external part; roots, and a neck which separates these two parts.

34 DESCRIPTION OF THE TEETH.

The teeth are composed of two very distinct substances. The internal is called the osseous part, or rather ivory, and forms the greatest part of a tooth; the external, which envelopes the former like a thin incrustation on all that part which is out of the sockets from the commencement of the roots, is called Enamel*.

^{*} The teeth are a compound of phosphate of lime and of gelatine: in the enamel, the gelatinous part being less abundant, the calcareous phosphate is more pure, so that this brittle envelope dissolves almost entirely in acids, without leaving any residuum.

MAN has three kinds of teeth: eight incisors, four of which occupy the anterior part of each jaw: four canine teeth are placed on each side of the former; these twelve teeth have one root only. Twenty grinders occupy the posterior part of the jaws, of which five on each side are above, and the like number below. Of these five teeth, the two first are named small grinders, and have two roots most commonly united to one another; the three others, situated more posteriorly, have two, three, or four roots, very distinct from each other: they do not appear till the second dentition.

36 DESCRIPTION OF THE TEETH.

At the extremity of each root there is a very small hole, by which the blood vessels and a nervous filament penetrate, destined to give it life and nourishment. The nerve and the blood vessels continue their course in a narrow canal with which the root is provided, and form in the interior of the tooth a pulpy mass, composed of a gelatinous substance, contained in a very thin mucous membrane, formed by the developement of the nerve and its vessels.

It is by means of this membrane, as we shall afterwards learn, that the tooth forms and nourishes itself, and acquires its increase.

DENTITION.

THE jaw-bones of the fœtus, at the sixth month, or even sooner, contain, at this early period, at the bottom of the sockets, the germs which sooner or later are to form the pulps of the tceth.

THESE germs appear at first like two gelatinous vesicles, adhering by one or several points to the bottom of each alveolar cavity: they are the rudiments of the teeth of the first and second dentition*. Around this germ are deposited successively, by the process of secretion (transudation), the laminæ which are to form the ivory † of the

[•] These germs become isolated in part or wholly by the frequently irregular development of an osseous partition, which forms progressively with the increase of the jaw-bone.

[†] It is deserving of remark, that the ossification of the teeth takes place in a manner altogether contrary to that of the other hollow bones. They are formed in concentric laminæ, which have a tendency with age to obstruct their cavity.

tooth. Each layer or lamina immediately acquires its hardness; and if by any accident the ivory is broken or injured, it is never repaired, this organized part enjoying but a very feeble vitality. This want of vitality explains, therefore, the insensibility, if we may so express it, of the osseous body.

THE mechanism by which the tooth, in forming, finds its way from the bottom of the socket towards the gums, is easy to conceive, since it is in this part that the resistance is least *. It is also by a similar

^{*} At the time of birth, the crowns of the twenty

process that Nature, in developing the second germ, about the seventh year of life, removes successively, and in the order which they appeared, the twenty milk teeth, replacing them by those which are to be permanent.

It is a common belief, that the second teeth derive their origin from the roots of the milk teeth; because the latter, in falling out, appear very often broken at their necks. This apparent fracture also has made it be imagined, that the milk teeth grow with-

first teeth are scarcely formed in their sockets, and the roots are beginning to elongate.

out roots. But the first teeth have in their principle, roots of a considerable size and solidity. These roots, however, are worn by the pressure of the second teeth during their growth.

The learned Professor Sabatier, after having adduced facts in proof of this wasting, asks, how the contact of two bodies, equally hard, constantly destroys one of them? and concludes, that there is in it something inexplicable. But the state of science, in the present day, affords us light, in a certain degree, to offer a reason for this phenomenon.

NATURE, always admirable, even in her smallest works, gives to the second germ, about the seventh year, an increased activity, which unfolds itself in all its parts in a most energetic manner. By the increase of the new tooth, the root of the first is compressed, the nerves and the blood vessels of the pulp are obliterated, and it is in consequence deprived of vitality. In such circumstances, the root being no longer endowed with a vital force to oppose itself with efficacy to its destruction, it insensibly softens, and its particles are absorbed by the powers of Nature alone; and the tooth, being no longer retained in its socket, falls

out, and leaves a space for that which is to replace it *.

THE eruption of the first teeth takes place in the following order, with the ex-

^{*}This doctrine, which seems to have obtained so generally on the Continent, has not been so fortunate in the British schools, especially since the immortal work of John Hunter has shed its influence over so large a succession of philosophers. The wisdom of Nature, which he has so scientifically unfolded, which establishes a mutual action between the sanguiferous and absorbent systems in her operations, has exploded the mechanical theory of the foreign physiologists. Translator.

ception of a few individuals. Between the sixth and the fourteenth month after birth, the middle incisors of the lower jaw first appear, and are very soon followed by their antagonists of the upper jaw; the lateral inferior and superior incisors then follow. After these eight teeth come into existence, the four canine teeth shoot forth, and always successively from the lower to the upper jaw. The four first small grinders protrude at two years of age; the second, between the fourth and the sixth year, often sooner. Towards the seventh year, the third or first large grinder shows itself, and that which follows it about the ninth or tenth year. Finally, the wisdom tooth, or last of all, does not come forward till about the eighteenth or twenty-fifth year, and frequently at a period much later *.

WE have now given, from the most ap-

^{*} It may be said, that the eanines do not always protrude before the small grinders; and many authors have observed that they generally show themselves after them. It is no doubt true, that the passage of the canines has been preceded in some instances by that of the small grinders, at least during the second Dentition; for we often see individuals, who have the former out of their natural order, and thrown forward, owing to the small grinders anticipating them, and filling up the void which was destined by Nature to receive them.

proved authors, the progress by which the phenomenon of the First Dentition is ordinarily accomplished. That of the Second, which commences between the sixth and the seventh year, follows the same order, and occupies the space of two years or more.

OF THE ENAMEL.

THE Enamel is the external part of the tooth: its thickness towards its extremity is at the utmost one line *, and it is still less upon its face: it covers all the part which is out of the socket, and grows gradually thinner towards the commencement

^{*} The twelfth part of an inch.

of the root. This polished and shining body, whose whiteness varies from a bluish to a yellowish white, is much harder than the ivory.

It is formed like the last by secretion (transudation) from the membrane which lines the internal walls of the sockets. This operation of Nature is made successively on the tooth, and does not cease till the enamelled part is no longer in contact with the membrane which secretes it, which does not happen till the complete formation of the tooth.

THE Enamel is capable of being altered

by several internal as well as external causes: this alteration may even proceed to its total disorganization. The internal causes, which can be duly appreciated only by those who are regularly and properly instructed in their profession, may be traced as far back as to the time of pregnancy to that of nursing, and to the diseases of infancy which accompany the period of the first dentition. Difficult digestion occasions also the disengagement of fætid eructations, which may alter the Enamel.

THERE are many other internal causes which we shall not now enumerate, but which contribute much to the alteration of

this substance. These may proceed from certain diseases become, in some degree, constitutional, or originating in hereditary predisposition.

WE shall shortly notice a few of the external causes, which every person, medical or not, may comprehend.

EVERY one is acquainted with the disagreeable sensation which acids occasion to the teeth, and which is known by the name of "setting on edge, (agacement)." This nervous sensation would appear to prove, against the opinion of some authorities, that the Enamel enjoys, to a certain de-

gree, an action of vitality and incontestable organic properties. It is therefore with some reason, that a well-informed modern practitioner has called this sensation the first degree of pain.

THE effect of the file upon the teeth of some individuals, would also seem to support this proposition. We have ourselves remarked, that this effect is not produced on all persons, nor upon all the teeth of the same individual. But how shall we explain the action of these two very different stimuli, the file and acids, upon a part which is thought to be inorganic? We beg leave to offer an opinion, which we believe

is that also of many physiologists of our own times.

By a chemical action, the acids soften the Enamel, penetrate it as well as the osseous substance, and probably carry their action as far as the very sensible membrane of the pulp. The effect of the file may be explained by the sympathetic irritation which its action produces upon the nerves of this membrane, owing to the more of less considerable waste caused by it in the wall of the tooth.

Bur the degree of irritability of the individual may perhaps be thought sufficient account for the sympathetic effect of the file, as it is only to be remarked upon certain subjects. We destroy this irritation by applying to the teeth chalky substances in the form of powder: this mean is particularly rational when the agacement proceeds from the use of acid fruits. The application of warm fomentations to the parts, may also remove this nervous irritation.

EXPERIMENTS prove to a demonstration, that acid substances not only soften, but crack and dissolve the Enamel. Tartar, insinuated between the gum and the neck of the tooth, may also separate it. Blows, falls, and in fact the mal-address of a rash

and ignorant Dentist, are also agents of destruction to this precious substance.

PEOPLE who inhabit marshy, cold, and moist countries, have rarely fine teeth. If to this unfavourable local situation are superadded the use of the pipe, and the habit of chewing tobacco, the teeth commonly become of a yellowish brown colour, deformed and shaking; the gums get diseased, and the toute-ensemble of the mouth offers the most disagreeable appearance*.

^{*} As a consequence of the use of acid powders and tinetures, we have remarked this cracking of the Enamel among people otherwise healthy, and

whose gums were perfectly sound. We have been able to refer those fissures or cracks only to the employment of substances too acid. May they not by their action contract the tissue of the Enamel?

OF THE WASTING OF THE TEETH.

THE wasting of the teeth, which is to be observed in almost all individuals, is principally occasioned by the friction of these small bones against each other *.

^{*}An intelligent author has advanced, that the teeth waste away by the two ends, and even more

THE Ivory part which is thus exposed, does not however decay, and resists the contact of the air nearly as well as the Enamel.

This natural destruction seems to authorise the hardiness of those who first had resolution to apply the file to the teeth; and experience has long proved, that it

at the root than at the opposite extremity; whereby, among old people, the part of the root thus worn, is replaced, according to him, by the inercase of the bottom of the socket, which insensibly obliterates itself. This opinion is far from being confirmed by experience. may be applied without danger to these bones, to remove a portion; provided always that the surgeon acts with due precaution, and imitates, as much as may be, the process of Nature *.

Actual experience can be adduced to the support of what we have advanced. Many nations have, in all ages, been in the custom of taking away the Enamel, to give to their teeth all sorts of shapes. From the earliest times Dentists have used the file; we have ourselves seen, either in the course of our own practice, or in that of others, teeth, from which a large portion of the osseous substance had been taken away, after several years, and without the least inconvenience occurring to these organs.

It should not be lost sight of, however, that some people, endowed with particular constitutions, cannot support the contact of the file on the teeth, which cannot be ascertained till the effect of that instrument has been tried. In any case, it should not be resorted to without necessity, and never applied upon the teeth of young people before the age of puberty.

THE intelligent author formerly cited *, observes, that we should have recourse to the file to separate the teeth which are

^{*} Dictionnaire des Sciences Medicales.

which, portions of our food introduce themselves, that cannot be removed by the toothpicker. This separation, besides, gives elegance to their arrangement, and cannot be followed with inconvenience but when done by an unskilled hand. This delicate operation is particularly necessary on the incisors, that they may be equalized to favour mastication, and to improve their appearance.

It may be added to these advantages, that it will also be a means of preventing the decay which so frequently takes place on the lateral parts of teeth which are too closely arranged, and which, by the contiguity of parts, communicates itself often too speedily from one tooth to another in an imperceptible manner.

In fine, immediately when it is discovered or suspected that one of the incisors has begun to be affected, the indication is always to hasten to isolate the diseased tooth from that which touches it, and to remove the caries. But it is rare that we can discover this disease before it is already communicated from one tooth to the other.

OF THE TARTAR.

THE tartar *, (a concretion at first soft and pulpy) is always deposited by the sali-

^{*} Tartar is a calcareous salt. Its chemical analysis shows that it is a phosphate of lime mixed with a portion of mucous and gelatinous substance. It is not, as is vulgarly imagined, a residue from our food. Fourcroy thinks, that the secretions of

va, and principally during sleep. It assumes, by degrees, a more or less solid consistence of a yellowish brown, and often black appearance.

This substance attaches itself particularly to the teeth of people who have delicate stomachs, and who, in constitution, are relaxed, and subject to catarrhal affections.

It is also to be remarked frequently

the mouth which constantly moisten the teeth, and lodge between the edges of the gums, deposite gradually by a real crystallization the particles of this concretion,

among those whose saliva is abundant and viscid, who have their gums pale, soft, and bleeding. In some people, the deposition of tartar takes place in great abundance, and with much rapidity.

It commences by accumulating itself by little and little in the intervals of the teeth, especially behind the inferior incisors, where the saliva is most apt to lodge: it surrounds their crown, and insinuates itself between the edge of the gum, which it separates and detaches from the tooth. Very soon it forms itself into a hard mass, which destroys the flesh, and penetrates even to the roots of the teeth and the cavities of the sock-

ets: it then shakes and displaces these small bones, and sometimes covers the whole with so thick an envelope, as actually to disfigure the exterior of the cheek.

DEEP seated caries of the teeth, or of the jaw-bones, may contribute to augment the disorder, to produce fistulæ, and purulent ulcerations of an insupportable fætor.

When this disposition to the formation of tartar exists, daily attention becomes necessary, either to prevent its formation and accumulation, or to remove it before it produces its ravages, since even its least effect is to contaminate the breath, and to

present an appearance always disagreeable *.

*When the simple attentions which we have recommended are insufficient to detach the encrusted and commonly adhering tartar, it will become necessary to have it removed with instruments.

OF THE TOOTHACH, (ODONTALGIA.)

THE pains of the teeth are regarded by nosologists as nervous pains. To understand well their causes, the reader will recollect what we have formerly said; that the membrane which lines the interior of the cavity of a tooth belongs to the mucous system, and that the vessels and nerves

which form it give it an exquisite sensibility. These elementary parts are the natural means of communication, through whose medium pain propagates itself from one tooth to another.

THE sensibility and the nature of this membrane, explains also why it is so frequently exposed to the sudden changes of temperature, produced by the immediate application of heat and of cold, the ordinary and general causes of catarrhal fluxions. These fluxions affect the mucous membranes, and are sometimes owing to the variations of the seasons, as well as to the sudden changes of the atmospherical

temperature; delicate people are the most subject to them.

RHEUMATIC pains, which are in general produced by the same causes, may, in changing their habitual seat, be transported to the jaws, and produce pains in the teeth, which the patient cannot always refer to a fixed spot. This removal of disease from one part to another, is to be explained by the continuity in the human body of white fibrous textures, which are the most usual seat of rheumatic affections.

It is therefore very evidently to the vital exaltation to which we have alluded, that are owing the greater number of the pains to which the teeth are subject, and probably also those nervous anomalies which are too obscure as yet to be explained. OF CARIES.

WHEN the toothach appears to depend on caries, which, after having destroyed the Enamel and the Ivory, opens the cavity of the tooth, and exposes the nerve to external impressions, extraction is almost always the sole remedy. If, however, we can paralise or destroy the nerve, either by that the cavity may be made to bear the introduction of foil, we often in this way succeed in removing the pain, and also in a great measure in stopping the progress-of the caries.

IT is possible that caries, in the commencement, and even in very advanced states, may not cause pain; and we have often seen teeth decay insensibly without producing the least uneasiness. Nevertheless, this morbid change in their structure is one of the most frequent causes of toothach.

In circumstances such as these, an intelligent and properly educated practitioner will know what are the resources of his profession, either to destroy or remove the cause, and if possible to preserve the tooth: but it is to be confessed, that in the majority of cases extraction is the ultimate resort*.

There is also another cause of toothach attributed to the consumption of the extremity of the root of the tooth; a disease against which the only remedy is extraction. As this affection is not visible exteriorly, it requires all the skill and judgoment of the practitioner to discover it.

It is only from particular circumstances, deduced from the causes, the actual state of the disease, the constitution of the patient, &c. that the practitioner will be guided in the choice of means to oppose to the pains of the teeth. He may occasionally employ, with more or less success, general or local bleedings, evacuants of different kinds, general or partial bathing, blisters, cauteries, sinapisms, emollient or anodyne cataplasms, narcotics administered internally or topically: in fine, he will use, with discretion and prudence, the various stimuli, internally or externally, as his judgement may dictate, and which a knowledge of his profession will enable him to select.

OF RHEUMATISM IN THE TEETH.

PAIN in the teeth most frequently depends on caries in those to which the painful sensation is referred. In this case, the pain is an affection of the nerve of the tooth exposed by the disease, and which experiences an acute and disagreeable impression by the contact of the acrid sanies

which the caries produces, by the application of the atmospherical air, of heat, of cold, and of all other things capable of acting unusually upon a nerve laid bare, and in a certain state of disease *.

In all these cases, pain in a tooth is but a symptom; the caries (of which we have already spoken) is the essential disease. But it often happens that very acute pains of the teeth are experienced without those parts being diseased; most frequently they are an affection of the white fibrous textures which form the sockets, and partici-

^{*} Gariot.

pate of the nature of rheumatic pains; in some cases, however, these pains seem to be purely nervous, and allied to the neural-giæ of the face.

Pains of the teeth affect those persons more especially who have been, or who are still subject to rheumatic and catarrhal complaints, or those who have experienced frequent attacks of disease in the mouth, by which this part is rendered more susceptible and more irritable.

SOMETIMES the pain appears fixed in a single tooth, which the patient points out as the seat of the pain. If a rash and unskil-

ful Dentist removes it, the tooth may be found to be sound, and the pain may continue to be as acute as before the operation: however, if the extraction has been painful and difficult, the pain may happen to be suspended for a longer or shorter time, just as it would have been by the application of a blister to the temple, or in the neighbourhood of the angle of the jaw, or by any other energetic means capable of producing a powerful and instantaneous diversion; but it is paying dear for the suspension of a pain, which will sooner or later recur, to obtain it by the sacrifice of a good tooth.

FREQUENTLY the pain is referred to the

whole side of one jaw, and the patient cannot precisely indicate its seat. Often also it appears to shift with unaccountable facility, and the sufferer feels it at one time in the upper, at another in the lower parts of the jaw; to-day, perhaps on the right side, and to-morrow on the left.

If the pain is very acute, and continues during several days, with a certain degree of intensity, the affection, at first limited to the white fibrous parts of the sockets, now extends to the cellular texture and to the mucous membrane which envelopes them. Swelling then supervenes: the teeth become loose and painful to the touch. If

this series of phenomena is obvious only in one tooth, its sensibility and its shaking would lead an ignorant practitioner to believe that it was diseased: and if the nature of the affection was not discovered in time, he would extract a good tooth without the least benefit being derived, and one which, at no very distant period, would have recovered its fixedness. In this ease, the gum sometimes remains fungous and soft during a longer or shorter period, and a small phlegmon not unfrequently forms on the spot.

PAINS in the teeth, which resemble in their nature rheumatic affections, are most

liable to occur in cold and moist weather among adults of vigorous constitution, who have had frequent diseases in the mouth.

WHEN pains in the teeth show a disposition to shift their place with great facility, like all rheumatic affections, it may happen that they will yield to the employment of the most insignificant means, even to the touch of some amulet, applied with an air of mystery and of confidence, which imposes upon the patient. Every one knows, that in timid people the presence of a surgeon, in most instances, is sufficient for a time to dispel the pain of toothach.

82 RHEUMATISM OF THE TEETH.

It is particularly for these pains that many Dentists, and even sage old ladies, have a favourite odontalgic elixir, of whose sovereign virtues they are so fond to boast. These liquors are almost all spirituous tinctures, whose powerfully stimulating action often suffices to suspend the pain.

In fact, a drop of tincture of opium, or of any one of the essential oils, applied to the part by means of a little cotton, may produce an instantaneous abatement of this pain for a considerable length of time, but which, however, rarely fails sooner or later to return. Frequent successes of this kind, of which marvellous ac-

counts are daily published, have successively brought into vogue numerous elixirs and various other means, all more or less ridiculous.

OF TIC DOULOUREUX.

TO the history of Odontalgia, which is essentially allied in its nature to the pains which chronic rheumatism occasions, we naturally join those pains of the face which have been called *Tics Douloureux*, and which appear to be affections of the same nature, or real Neuralgia.

* This disease seems to have its seat in the nerve of the part which is affected, or at least in the membranous sheath which envelopes the nervous pulp, for the pain generally follows its course. This convulsive affection is remittent or intermittent: in the latter case, the accessions of pain are periodical or irregular, and vary in their force, duration, and intensity.

Tic Douloureux manifests itself by a convulsive movement in some of the muscles of the face, always creating uneasiness, and sometimes amounting to most acute pain.

[&]quot; Gariot.

It most commonly first attacks in the upper lip, from whence it extends along the alæ of the nose towards the inferior eyelid, sometimes it commences in the sides of the mouth, and not unfrequently affects both the eye-lids and the muscles of the eye.

In some cases, this affection appears to be confined to a solitary spot of the face: but when it assumes a great degree of exasperation, it comprehends all the side of the head and neck. The primitive or essential seat of this disease appears to be the three principal trunks of the trifacial nerve, and their different ramifications.

rare disease, and attacks chiefly those persons who are of feeble and irritable constitutions. It seems to be often caused by the impression of cold and humidity, such as are experienced during the prevalence of a north wind: it sometimes coincides with catarrhal affections, and is almost always accompanied by symptoms of rheumatism or gout; in some instances it has been known to have been suspended by an accession of either of these last diseases.

WE have known Tic Douloureux to supervene after the suppression of an hæmorhagy, or some habitual excretion, or after

the retrocession of some disease in the skin, fistulous ulcer in the gum, &c.; and it has been thought in consequence, that the humour of these various affections, transferred to the nerves of the face, produced the disease; an hypothesis doubtless founded upon the mistaken proverb, " post hoc, ergo propter hoc." But it is much more rational to suppose that the invasion of Tic Douloureux occasioned the cessation of these different discharges, and that their suppression was rather an effect than a cause of the disease. In certain cases, however, this affection appears to have been directly excited by a contusion on the course of the nerve, by its puncture or

laceration, or by the growth of a tumour which occasioned to the nerve a continual compression.

TIC DOULOUREUX presents indefinite varieties in its progress. Sometimes it is only a fugitive pain, which scarcely lasts a few seconds, and disappearing to return after an uncertain interval; at other times the paroxysm lasts for several minutes, and recurs several times in the course of a day.

FREQUENTLY this disease becomes periodical in its returns. Thus the accession, which takes place most commonly towards evening, may last for several hours, and ecur every day nearly at the same period, &c. and the pain will generally be found to have its seat in the two maxillary branches of the trifacial nerve.

ALL the middle and inferior parts of the face on the side affected will be observed to be drawn together, as it were, and in a state of habitual contraction; the secretions of the salivary glands and pituitary membrane are much augmented, and the patient experiences the most exquisite pain, with convulsive twitchings of the affected muscles, every time that he makes an effort to speak or eat.

Treatment.—Nervous affections of the face are in general very obstinate, and all the most active means which medicine affords are required to combat them.

The local disease is ordinarily accompanied by a general constitutional derangement, such as fever, sleeplessness, loss of appetite; and the foul state of the tongue often announces a corresponding condition of the digestive organs. In such cases, if energetic means, suited to combat the different general symptoms, are employed, the disease may be often readily enough overcome. Thus the repeated application of leeches to the neighbourhood of the af-

fected part, an emetic, the continued use of diluents, laxatives, baths, or of purgatives, conducted with prudence, according to the strength and particular state of the patient, has been often found to be sufficiently efficacious.

When the disease has passed what may be called the first stage, which we have just described, and has resisted the treatment which we have recommended, it assumes a perfectly chronic character, which debilitating means are more apt to exasperate than to benefit. We ought in this stage to resort to the employment of the various stimulants, tonic bitters, antispasmodics,

&c. As all these means have succeeded in the hands of practitioners, they have each successively had their abettors. When the returns of pain are periodical, bark employed in large quantity, modified in its form according to circumstances, has succeeded with some. In other cases it has been found not so advantageous, but the pains have yielded to opium, camphor, æther, musk, arsenic, &c. administered interiorly, or, as has often better succeeded. applied to the part affected. Ice has even been employed, and occasionally with considerable efficacy: at other times it has only caused the pain to shift; but in some cases it has exasperated in a great degree the nervous irritation. Conjoined with this treatment, we would recommend warm fomentations, to palliate the local agony, a quiet mode of life, moderate exercise, light and easily digested food, &e.

When these means fail, and when the disease begins to become protracted, it has been much the fashion to send patients to hot mineral spas; and certainly there are instances of advantage being obtained in this way, but we ought perhaps to attribute it as much to the change of air, travelling, distraction, &c. as to the efficacy of the waters.

A small abscess has sometimes formed in the vicinity of the part affected with Tic Douloureux, which when discharged, and especially if it has remained open for a time, has often proved a cure. This has given origin, perhaps, to the employment of blisters, the seton, moxa, caustics, and the actual cautery, which have all in their turn been useful; but much more frequently they are unsuccessful, and it will be fortunate if no severer accident is occasioned by them.

WHEN Tic Douloureux follows as a consequence of a slight wound or contusion, we have sometimes succeeded in effecting a cure by making a deep incision in the part wounded or contused, and maintaining the discharge afterwards for a longer or shorter period. It would seem that in certain cases the pain was continued by the lesion of a nerve which had been partially torn or irritated, but which entirely ceased the instant it was completely divided.

Observations such as these have led several celebrated practitioners to propose the section of the nervous branch, which is the principal seat of the disease, when it is practicable; and this operation has been actually done upon the sub-orbitar nerve, where it passes out of its canal, by making

the incision externally, or what is preferable, as it avoids disfiguration, by detaching the superior lip, and cutting down upon the nerve on its upper and internal surface. But in spite of all the cares which have been afterwards taken to promote suppuration and a discharge by irritating means, such as caustics and even the actual cautery, it has hitherto generally happened that the benefit and relief are but temporary.

THE last order of energetic means which have been recommended in Tic Doulou-reux, are magnetism, electricity, and galvanism. The employment of these physical stimuli has sometimes succeeded, and they

have at least the advantage of occasioning much less inconvenience than the various operations of which we have just spoken. REFLECTIONS UPON THE USE OF POWDERS, TINCTURES, &C.

WE shall now shortly endeavour to pass in review the substances which are commonly employed with the intention of maintaining the mouth in good condition, and as far as with us lies, to point out to what degree people may be deceived in their choice of means to accomplish this object.

100 ON THE USE OF POWDERS, &c.

IF we are happy enough to convince our readers of those things which are destructive or injurious, we shall consider ourselves well repaid for what we have done in their behalf.

FROM what we have already said of the facility with which the Enamel may be altered, we are satisfied that the acid powders and tinctures are most dangerous agents, which never whiten the teeth but at the expence of an injurious alteration in that delicate substance.

Powders not sufficiently fine, or those into which substances of a very hard na-

ture enter, are equally destructive to the Enamel: those which are too hard wear it away insensibly, the others deprive it of its polish, and lodge under the gums.

It is proper, therefore, to consult, when it can be done, the Surgeon-Dentist upon the choice of powders and tinctures, which we consider as indispensably necessary, not only for maintaining the mouth in perfect cleanliness, but also as being necessary to remedy many of the diseases of that cavity. Of this number are caries, scorbutic and catarrhal affections, ulcerations of different kinds, &c.

102 ON THE USE OF POWDERS, &c.

BRUSHES too hard in their fabric are not less injurious; they lay bare the teeth and make the gums callous. It is not an indifferent matter to consult the Surgeon Dentist also upon this point: He alone knows to make an appropriate choice of these instruments, and to adapt them to the age, the diseases, and the more or less delicate texture of the internal membrane of the mouth.

MANY people clean their teeth with tobacco, coffee-grounds, or burnt paper or bread. These are, to say the least of them, insufficient, and may colour the teeth instead of whitening them. They are also liable to detach the gums, by introducing themselves between them and the necks of the teeth.

A metallic tooth-picker should never be used; such as are made of quills are the best, but they ought at the same time to be used with precaution.

It is equally pernicious to eat any thing very warm, and especially to drink any thing very cold afterwards,—every sudden change from one temperature to another, when frequently repeated, never fails to alter the structure of the teeth, and parti-

104 ON THE USE OF POWDERS, &c.
cularly among those individuals whose constitutions are very irritable.

People among whom tartar is easily reproduced, should pay daily attention to their teeth. It is the only mean of averting the most frequent causes of caries. They should contract the habit of cleaning the mouth three or four mornings in the week, with some approved powder. After every repast they should make a simple lotion with a soft brush or with a spunge steeped in pure water; and we would beg to recommend to them not to fatigue the gums uselessly.

This trouble will appear at first irksome and laborious, but once that custom has made it a necessity, it will be resorted to with facility and pleasure.

OF THE GUMS.

WE have already remarked, that the good state of the teeth depends very frequently on that of the gums. We should therefore be careful in observing whether these parts become soft, whether they are subject to swell or become callous. This latter condition ordinarily provokes suppuration of the

border which is adhering to the teeth, which in consequence becomes detached. In such cases, slight scarifications with a thin lancet are necessary and very useful, and the employment of some tonic wash may afterwards be extremely beneficial.

OF ULCERS OR APHTHÆ IN THE MOUTH, &c.

WHAT we have just remarked concerning the gums, leads us necessarily to notice these superficial ulcers which have their seat in the mucous membrane of the mouth which lines the internal part of the cheeks, the lips, and the gums.

THESE small ulcers appear very frequently among people who inhabit low and humid situations, who have consitutions relaxed and subject to catarrhal affections,
and whose saliva readily contracts a certain
degree of acrimony. They supervene principally during rainy winters, and in cold
weather. We have also remarked that such
people are likewise in some degree prone
to them during the excessive heats of summer, after too violent exercises, or the use
of-heating aliment.

THEY are also maintained by the presence of tartar, and by caries of the teeth. THESE ulcers, commonly isolated, announce their presence by an irritation, at first rather lively, upon one or several points in the interior of the mouth. They searcely exceed the size of a pin head, have a circular form, and are surrounded with a slightly hard and callous tumefaction, which presents a colour a little deeper than that of the other parts of the membrane.

THEY are easily irritated by food of the slightest aeridity, or of a temperature rather elevated; and if the cause which first produced them is allowed to persist in its effects, they quickly extend in size and in depth, often assume a very virulent charac-

ter, and cause much inquietude, especially among children.

In such circumstances we would only recommend the advice of a respectable practitioner, as the rule of conduct.

WHEN the gums are soft, swollen, livid, and bleeding, this state may depend either on a catarrhal or scorbutic affection.

THE first, the most frequent, and too often confounded with the scorbutic, is very commonly a local affection, which may be remedied by the means which we have already pointed out.

THE scurvy, on the contrary, is as pecific disease, which embraces more particularly the whole muscular system, and is owing to a combination of a multiplicity of causes of which the alteration of the gums is but a symptom.

As the abridged plan of our Work will not permit us to treat of this disease, we must content ourselves with only having noticed it. We shall just remark, that the local treatment which we have already pointed out, being but imperfectly ade-

quate to remedy the unhealthy condition of the gums among scorbutics, the disease ought to be treated by the general means which are the province of the regular practitioner.

It also often happens, that in spite of the means mentioned against the formation of tartar, this substance accumulates either around the large teeth, or on the posterior face of the incisors, where the brush does not reach. It is then, as we have already said, that it becomes necessary to remove it with an instrument. Commencing caries may also take place, (even among those who have good teeth) without occasioning

the least pain, upon the lateral and posterior parts of the large teeth and the incisors; the accustomed eye of the Surgeon Dentist can alone discover and remedy these defects.

Many people lose their teeth, after having experienced the most exeruciating pains, who, by means of a gentle operation timely performed, would have avoided them and also saved their teeth. But too often no complaints are made till the caries has made its progress among several of them.

Such, then, are the advantages and insonveniences attached to the healthy or diseased state of the mouth, and such are the means, the most simple and proper, to preserve this part of the human body in good condition.

WE think it will not be deviating far from our purpose, in terminating our Work, to make a few observations upon the subdivision of Surgery, and the essential qualities which ought to be combined in him who devotes himself more particularly to this branch of the healing art, and whose advice, in such cases, becomes indispensable.

OBSERVATIONS

ON THE SUBDIVISION

OF SURGERY.

WE are of opinion that it would be for the advancement of Operative Medicine, if Surgeons were to divide themselves more among the different branches of which it is constituted. This art is, in fact, too extended in its nature for one man to acquire the ame successful address in all its operations; at least to derive beneficial results from his experience, so as to improve the profession so much as he would otherwise do *. Thus some might devote themselves to midwifery, others to the treatment of the diseases of the eye. Among those who practise the higher operations in Surgery, some might devote themselves particularly to that of Lithotomy, in the same manner as we observe in the medical practice of large cities, that there are always physicians who apply their talents, in preference to the treatment of Syphilitic diseases, to

^{*} Gariot.

affections of the chest, to the diseases peculiar to women and children, &c.

CERTAINLY this subdivision of the healing art would be a principal means of promoting more rapid progress in medical science, if all those who devoted themselves to particular branches had the same preliminary knowledge, and spoke in a common language. But unfortunately the greater number of those who already follow this plan, are proverbially deficient in the qualifications which are requisite to enable them to deduce inferences from their experience, which can in the least

serve towards the promotion of an end so desirable.

It cannot be too often repeated, whatever be the branch of Surgery to which a
man exclusively devotes himself, that it is
essentially necessary for him to be minutely instructed in the important knowledge
of Anatomy, Physiology, and General Nosology, as well as being acquainted with
the resources which are to be derived from
the Materia Medica; without which he
must be totally ignorant how to apply his
particular observations to any general doctrine. Some may acquire a useful manual
dexterity in many cases: but their expe-

rience will be only individual, and totally unavailing to the advancement of science.

Most frequently those who destine themselves to the treatment of affections of a particular part, think that it is sufficient for them to know the structure and functions of that part, and the diseases to which it is subject, to be acquainted with all which concerns it. They forget, or perhaps are ignorant, that there is no part which enjoys isolated action; that the phenomena of health and of disease which each presents, depend on a common principle of life; and that, in a majority of cases, it is not a particular treatment alone which is

suited to a local affection, but many general attentions, the totallity of the corporeal organization being required to be modified in its action, to bring about an amendment of local derangement.

Thus, whilst the domain of Medical Science is divided into different provinces, which are cultivated separately by men who are acquainted with the basis of organic knowledge, we may say that these men will aid one another in a common labour, and will, as it were, lay the materials on the same scientific foundation, and all equally contribute to its progress. On the other hand, when men, strangers to the

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structure and to the laws of organization, practise the different branches of medicine, they only disjoint medical science by tearing asunder all its relations. They allow themselves to be guided by a blind routine, and their observations as well as their experience can be of no value, from their ignorance either how to draw conclusions, or to apply them to the common principles of a fundamental doctrine.

IF Surgery has need of being subdivided in order to its advancement and perfection, such subdivision is in a particular manner applicable to the branches which require great manual address: and perhaps there is no one which demands more habit and dexterity than that of the Surgeon Dentist. If he who embraces it joins to the knowledge of a detail of his art, that which is required of every medical man, and which we will endeavour to specify more particularly in our following chapter, he will not fail to hold a distinguished rank in science, and to contribute to the elevation of a branch of the healing art which has been but too long usurped and degraded by ignorance and presumption.

QUALIFICATIONS

OF THE

SURGEON-DENTIST.

IN endeavouring to pourtray what ought to be the qualifications of the Surgeon-Dentist, we shall insist but little on his mechanical knowledge, as this part may be reserved to the artist skilled in the use of the instruments of the goldsmith and watchmaker *.

We do not wish to insinuate that the mechanical part ought to be exclusively reserved to those who are properly called mechanics; we know many Surgeon-Dentists, who, with the best professional talents and education, combine an admirable address in the finishing of artificial teeth.

We believe, on the contrary, strictly speaking, that these teeth could not be properly adapted to the mouth, but by the hands of him who is acquainted with the structure of that part, and is in the habit of performing operations on it. It will ever be desirable, therefore, for the patient to find in the same individual both the well-informed Surgeon and the skilful artist.

It is the duty of the practitioner, however, who devotes himself to this branch of his profession, to neglect nothing which can merit the confidence of those who entrust themselves to his care.

It is requisite then, nay, it is indispensable, that the Surgeon-Dentist be initiated in all the branches of the healing art, but above all, that he be intimately acquainted with the anatomy of the mouth, so as to practise with safety on it all the operations which are necessary. He ought to possess physiological knowledge, correctly to appreciate the phenomena which take place in the human body in the states of health

and disease, and to understand well the functions of our various organs. It is only by the aid of chemistry and physiology that he can comprehend the minute composition of the teeth: without the latter science, he is totally ignorant how to estimate the sublime operation of Nature in the developement of their germ, their mode of increase, nutrition, &c.

HE ought of necessity to know all the resources of Surgery, to be able to practise operations on the mouth, and to make a suitable application of the medicines which are proper to prevent or to cure the numerous diseases to which that part is in-

eident;—diseases, we may observe, which in general depend more or less on the morbid state of the teeth.

WE do not hesitate then to affirm, that all these branches of knowledge are indispensable to the Surgeon-Dentist, and that without them he is unqualified either to discover or to apply, in the diseases of the mouth, the proper remedies. Without them, in fine, he ought never to command the confidence of the world, or induce patients to trust with security to his care the remedying of affections in organs so precious as the teeth.

INDEPENDENTLY of the knowledge which we have specified, it will be advantageous that the Surgeon-Dentist be not a stranger to medicine, properly so called, since he has often occasion to treat affections of the mouth which proceed from internal causes. Such, for example, are the scorbutic, catarrhal, rheumatic, &c. Besides, in consequence of the operations performed on the mouth, fever or some nervous concomitants may supervene, and the knowledge which he borrows from medicine will enable him to resort to the usual and regular means of removing them.

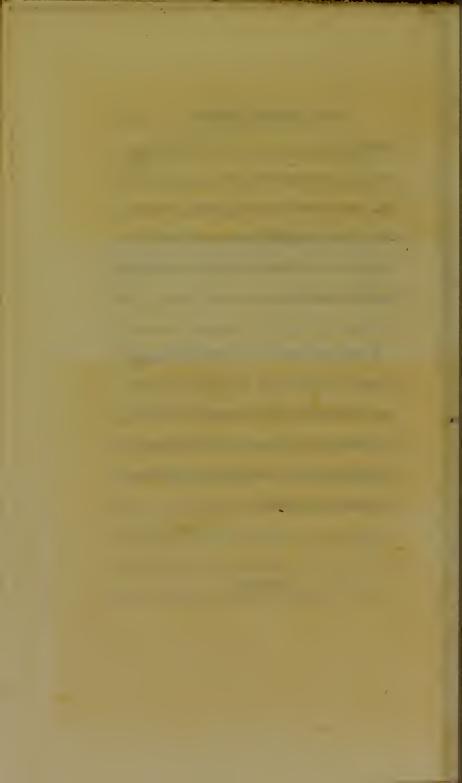
Ir he practises midwifery, the diseases of

children become more immediately a part of his province; and he will thus be enabled the more easily to afford them aid about the period of the second dentition. He will also know, in some degree, how to remedy the inconveniences which women experience so frequently during the course of pregnancy.

In fine, the essential qualifications of the Surgeon-Dentist ought to be a sound and scientific judgement, a sure and dexterous hand. The daily operations which he practises upon the teeth require much sagacity and precision. He ought to be able to extract adroitly the carious teeth, or the roots

which cause pain. He will have to preserve, by means of foil, the cautery or the file, teeth which are beginning to alter. He will be frequently called to remove tartareous incrustations which are forming round the teeth, &c.

A thing which all the world has a right to exact of him, and to which the ladies above all seem to attach much importance, is extreme cleanliness in his instruments, which ought to be numerous and of forms necessarily very varied.



ERRATA.

P. 53. line first, read " to account."

p. 77. line third, for "neuralgiæ," read "nevralgiæ."

p. 83. last line,

p. 112. line third, for "as pecific," read "a specific." p. 131. line fifth, for "tartareous," read "tartarous."



